Statistical tables xxx

Statistical Tables

FOR

HOSPITALS FOR INSANE.

[Reprinted from the *American Journal of Insanity*, for October, 1871.]

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STATISTICAL TABLES

FOR HOSPITALS FOR INSANE.

The Committee on Business reported that the next business in order was the consideration of the report of the Committee on Statistical Tables.

On motion of Dr. Curwen, the Association proceeded to the consideration of that report.

Dr. JARVIS. Copies of the report in extenso have been in the hands of the members of the Association for several months. I have endeavored to get it up in such a way that the experience of every hospital can be presented, and made useful as a matter of study. I have been in the habit of examining the reports of all the hospitals in this country, many in England, Ireland, and Scotland, and in continental Europe. In drawing up the report, I endeavored to concentrate their wisdom. After a great deal of thought, comparison and coördination, I arranged these forms. I do not mean to say, that this system is perfect; I think by further experience and observation, valuable suggestions will be made, which will improve these tables.

Dr. KIRKBRIDE. I regret to say that it is some time since I looked over these tables; but I have no doubt whatever of their convenience and usefulness, from the simple fact that Dr. Jarvis has complied them, after a very full examination of all the forms of tabulation that have been recommended, and his recommendations may fairly be considered almost conclusive on that point. There may be some difference of opinion with regard to the value of these tables; but a large part of them are those which I have been in the habit of preparing, and from which I have always supposed some advantage was to be derived, enough certainly to compensate for all the trouble their preparation had given. As you are aware, I have always prepared more tables than some of my friends, for whose judgments I have the greatest respect; and

while the labor has been considerable, as I have already said, I have always thought there has been enough benefit to justify their continuance. The value of all statistical tables, necessarily depends upon the care used in their preparation, on the ability of the compiler, and upon the number of cases, and the length of time to which they refer. Because statistical tables are not perfect, does not seem to me any reason why we should not attempt an approach to perfection. Many statements in all tables must be matters of opinion, and I do not see why an opinion in regard to points connected with insanity, may not be just as reliable and as valuable as on any other subject.

Dr. SHEW. I received a copy, and read it through with a great deal of interest; and as the time was approaching when it would be necessary to prepare our reports, I decided to follow these tables. Our institution being a new one, having admitted up to this year only four hundred patients, it seemed to me that by adopting this form we should be making progress in the right direction thus early in its history. I can assure you that it will require some time and attention to make up the reports, particularly in older institutions where the number of patients received has amounted to thousands; but after the tables are completed once, the labor for each succeeding year will be comparatively small.

There are one or two practical suggestions I would make. By referring to table No. 20, "Causes of Disease of those recovered from the beginning" of the hospital—a valuable table, but in looking through all the tables you find no one devoted to "Causes for all cases." There is simply a table of causes of those recovered from the beginning. I would ask if it would not be advisable, in some part of this statistical report to have a table of causes, or supposed causes of all cases admitted. There is none in the entire report. I think there should be something in this form, or some other form, to give as near as possible, the physical, or to those who view it in that light, the moral causes.

Dr. JARVIS. If it is not in the report it is a very gross mistake of mine. I have been led to imagine that it is there, and that I put it in.

Dr. SHEW. I made up my mind that in our next report we should insert it, whether the Association adopted this or not. We did not insert it this year, but followed the exact tables.

Further on, we find table No. 30. This gave us some trouble to reckon the per cent. of recoveries of each year, cases of one

year and over; all discharged (including deaths,) and so on. Then the last average gives deaths of all under care; then deaths of the average number in hospital. I would suggest that an additional line be made at that point, to give the deaths of the average number for the entire year. It can be done by simply one line at that point, and very little additional labor. In the last table is furnished the financial history. In this table, No. 33, giving the year, (each year of course,) whole cost of supporting patients per year and per week. I can imagine that this table might mislead, from the fact that different institutions are differently organized. For instance, in our institution, the whole expense for all purposes whatever, (improvements, repairs, construction, salaries of officers and employés, and the general support of the institution,) everything is included in this table; but I know that some other institutions in giving the cost per year, per week and per day, have only included the support of patients; the salaries of the officers being a regular State appropriation especially applied to that object. I think that in New Jersey, New York, and it may be some other States, the salaries of the officers are included in the annual appropriation bill, the same as the salaries of the Governor and Lieutenant Governor, and do not appear in the history of the institution. Hence in estimating the average cost per week as five dollars per patient in some hospitals, and in others six or seven dollars, there might be an apparent unjust difference; therefore in this table something additional might be put in the form of notes or columns, stating that this does not include the annual professional support, or, as in our case, that it includes everything.

In table No. 12, complications in those admitted, males, females, total, in the year and from the beginning, I suppose there will always be some difference of opinion respecting the facts contained in this table; but I ask of Dr. Jarvis, or the committee who prepared these tables, simply for a little instruction in making it out. We have followed it as nearly as we could, but do not exactly understand it. By a complication, do you mean some physical disease not belonging expressly to the neuroses? For instance, some might think it of interest to report that a certain number of our patients have suffered amputations of the right or left legs, or facts of that kind. I suppose that that was the object of the table; but we find here forms, aphasia, then apoplexy, then chorea, then hemiplegia, and so forth. It seems to me that many of these would be termed causes of insanity, rather than complications in the disease; for we have in addition, paraplegia, paralysis, agitans, progressive muscular atrophy, and heredity.

Dr. JARVIS. That is taken from the English. It is exactly their form of words. I think that explains itself.

Dr. SHEW. That is what I wish to know, whether any one can make the list as long as he pleases? Simple complication, schirrhus of breast, &c.

Dr. JARVIS. That is the English form.

Dr. SHEW. Perphaps a word in addition to the hearing would save considerable trouble and study on the part of others. You wish it to be merely nervous complications, &c.

Dr. JARVIS. Yes, that is the intention; yet gentlemen can make additions if they think proper.

Dr. SHEW. These were all the points that puzzled me at all, or elicited any thoughts or suggestions that would be important.

Dr. JARVIS. In the omission of causes, I can not explain it in any other way than that it must have slipped out. I thought it was in.

Dr. PARSONS. I would like to inquire whether some of the other causes would not be considered important; for instance, if a considerable number of the insane had phthisis pulmonalis.

Dr. SHEW. One additional thought occurs to me while looking over table No. 2, and it has a bearing on our discussion of the first evening or first day in reference to cases reported as not insane. I find that this misled our friend Dr. Parsons in his estimate of the total number.

You will notice in table No. 2 we report so many discharged recovered, improved, stationary, died, and not insane. I suppose every institution, if it is organized as ours is, to exclude idiocy, will sooner or later have cases sent to them legally, which they can not refuse to receive, but will be able to discharge soon after receiving, as idiots. A word of explanation in the form of a foot note would probably have prevented Dr. Parsons from being misled at that time.

Dr. PARSONS. Perhaps I misunderstood Dr. Jarvis. I would like to inquire if complications such as phthisis pulmonalis are intended to be included, or such only as are mentioned in the original draft?

Dr. JARVIS. These are merely according to the opinion of the several Superintendents. Some put in as causes, are probably preceding or coëxisting events, and some even are rather the consequences than causes of the disease. It is best to take them as reported by the Superintendents, and every one will make the needful correction.

Dr. Bancroft. I think such a modification should be made in the table relative to cost for support, as would show the cost for support irrespective of expenses outside of board. I know of some hospitals, and I think there are quite a number, in which no expense for the clothing of the patients is assumed by the hospital. Any expense for clothing is a separate affair, and is charged to the friends of the patient, or when they are supported at public expense, to town or counties. I think that should be so arranged that the cost of support, when stated, should be irrespective of any thing furnished,—simply living cost,—otherwise we shall be liable to misrepresentation between the different States. It seems tha in the report of Dr. Shew it includes every thing, while in other institutions, as in ours, the matter of clothing, or other articles furnished, and even to some extent, repairs, are outside of the support account. With us, in order that board may be reduced as low as possible, we have funds devoted to certain improvements and repairs, which otherwise would come into the board accounts, and that is kept entirely separate from the ordinary accounts; so that in making a final footing, the actual expense for support would include much less than in the Connecticut report. It strikes me it would be well to make that modification, and fix a standard of what should be included in this item. I think that clothing and improvements could be well stated, aside from the expenses of living, in a separate item.

Dr. Gundry. I have not very much faith in figures. We all know the saying that "figures will not lie," but, unfortunately, those who use them sometimes do. Unfortunately in the State where I belong, the law requires that we shall give tabular statements. I, therefore, have been obliged to work somewhat under protest. We do not differ very much from this programme submitted by Dr. Jarvis, but there are one or two things which strike me that I will remark upon. I can not see of what use the table giving the residence of patients is. What does it matter whether the man comes from one part of the country or another part? It furnishes no information with respect to the disease, or the influences which may have modified its causes, or the modifications, or the progress. I think it is encumbering the page, and that tables not giving useful information had better be set aside.

In table 2 "form of disease in those admitted," if we are going to bring things down to the uniform standard, it would be well to define the forms of disease we are called upon to give. If we are going to define, what more is necessary than to take the four lead-

ing divisions which have prevailed since the days of antiquity. If we are going to enter into all the real pathological modifications, then we shoull set some limit so as to form results.

Complications have already been explained. There is no table gives rise to so much form as the "disease," there is so much time taking down the form. The patient comes in, and you put down the form. Perhaps that is the only excitement you ever see. On the other hand, you sometimes find that you have got a very excitable patient on your hand. I think it is an exceedingly difficult thing to tabulate so as to give a true idea. In every institution where patients are received at the earliest stages, you will have a proponderance of melancholia. If you do not receive them for several months, and they are subject to poor-house treatment, you will have a majority of cases of mania, in all probability. That conditions of thing conveys a different impression from what you wish to convey. I think, therefore, that this table should be cut down, as there are four leading divisions. If you are going to varieties, I think you should add an additional table on the natural varieties of disease. "Causes of disease of those recovered." Unless we have some way of classifying causes, that would lead, in the course of time, to a very long and complicated table, and we would keep adding accordingly. Taking this matter "connected with poverty or privations" how different would be the conclusions of different minds! Take the words "nervous shock" as entered. Why not include it in ill health? "Business anxiety" we would think would be connected with "fluctuations of fortune." "Overstudy," that is an eastern institution; I do not think we are troubled with that. The table, of "death and its causes," I suppose, we all have to keep; but I could suggest that the method adopted elsewhere is more useful, which is simply to make a minute, the same as Dr. DeWolf does in his report of the condition of the patient, and a general statement of the history of each case, and generalities afterwards. I think that would be more satisfactory. The reasons of death will always be a matter of a good deal of liberty in large institutions.

Now comes that financial history; allow me to illustrate how widely the results will differ, and how misleading they will be unless we are careful. Dr. Shew says his report comprehends every expense, as I understood, incurred during the last year. The report covers about the same time that the report does which I have to make, and to cover similar expenses, including improvements; but ordinarily, our States makes an appropriation outside of

what are called current expenses. For instance, I have a certain sum for current expenses, and a certain appropriation for putting on a roof, while an institution in the same State has five or six special appropriations; therefore we can not compare two institutions, even in the same State. Then we have large additional appropriations to salaries which are never accounted for, and which never came into the hands of the institution at all to disburse, nor do any of these special appropriations. We are supposed to clothe from the current expenses, while in Indiana they are supposed to pay a certain sum which is in addition, I understand, to their current expenses, so that there will be nothing here except what will be calculated to mislead.

Dr. PARSONS. I would like to make an inquiry regarding the result that should be recorded in certain cases of recurrent and of epileptic mania. When admitted they are usually in a state of acute mania. When discharged they are usually rational; that is they are not insane. And yet the diseased condition on which the recurrence of insanity depends, remains substantially the same as at the time of admission. Shall they be discharged as recovered because they present no symptoms of insanity when discharged? Shall they be considered as improved because their condition is in some respects better than at the date of admission? Or shall they be discharged as unimproved because really there has been no essential change in their condition taken as a whole; that is as including the whole cycle of mania and lucid intervals; or of melancholic mania, and lucid interval.

I would like to make still another inquiry. When a patient is discharged, should the form of insanity on which the result is predicated be that manifested at the date of admission, or should it be the predominating type manifested? Should a case be discharged, as for instance, mania unimproved, because the form of insanity was mania at the date of admission, or should a case of mania at the date of admission be discharged as one of melancholia, or chronic mania, or dementia unimproved, because one of these last was the predominating type of the disease during the residence of the patient at the asylum?

Dr. D. T. BROWN. At Bloomingdale Asylum the system of tables recommended by the committee has been followed from time immemorial, though to a limited extent only. The table is a simple one, limited to the general movement of the population. The reasons for this are mainly that the institution is small, averaging only 130 patients, and the fact that most of the families of these patients desire to know as little as possible about the hospital.

Dr. DeWolf. I desire to bring to the notice of the Association a form of Case Book, being a modification of that recently proposed for adoption in England. The Medico-Psychological Association appointed a therapeutical committee for the purpose of taking certain questions relating to the uniform recording of cases of insanity, and to the medical treatment of insanity into consideration. As a member of that Association, I received a copy of the proposed form, with a request for my opinions and suggestions as to its use. In reply I sent a copy of the form now before you, and stated my purpose of bringing it to the notice of this meeting. Dr. Clouston, the secretary of the committee, in his answer, dated Carlisle, April 5, 1871, states: "I do hope that we and our American brethern will be able to work together in this matter of getting up a good case book form. I am strongly convinced that the use of a good form will do much for us in promoting scientific accuracy of mind in ourselves, in our views of the cases treated by us, and also in keeping up our characters as physicians." I lay this, together with the English form, which is almost identical, upon the table, and take the liberty of making further remarks.

PROPOSED CASE BOOK—(ENGLISH.)

NAME — ADMITTED
AGE AND SEX — STATE AS TO MARRIAGE — EDUCATION
WHERE FROM — OCCUPATION — RELIGION

History.

CAUSATION
- Previous attacks — Where treated
- Hered. history — Disposition and habits in health
- Predisposing
- Exciting

DURATION OF DISEASE

FIRST SYMPTOMS
- Mental
- Bodily

RECENT SYMPTOMS
- Mental
- Bodily
- Suicidal — Dangerous

Other facts

State on Admission.

MIND
- Exaltation
- Depression
- Excitement
- Enfeeblement
- Memory
- Coherence
- Can answer questions?
- Delusions
- Other abnormalities

BODY
- Appearance
- Color of hair — Color of eyes
- Muscularity — Fatness
- Nervous System
- Reflex action — Pupils
- Special Senses — Retina
- Lungs
- Heart — Pulse
- Other organs
- Tongue — Appetite
- Urine, Sp. gr. — Urinary deposits
- Menstruation — Temperature
- Height — Weight

NAME OF DISEASE — GENERAL BODILY STATE

DATE	Temperature		Pulse		Weight.	*Progress of Case.*
	Morn.	Evg.	Morn	Evg.		

Memoranda to be put in Beginning of Case Book.

HISTORY.

Previous Attacks.	Number, character of each.
Hereditary History.	Age of parents, relationship of parents or grandparents, health of same, family diseases or peculiarities—consumption, epilepsy, drunkenness.
Predisposing Causes.	Drunkenness, overwork, character of vocation or habits. Food, tobacco, tea, infantile diseases, adult diseases. Catamenial irregularities, marriage, children, difficult labors, miscarriages, lactation, &c.
Exciting & Proximate Causes.	Disease of brain emotions—blows on the head, drinking bouts, fever, poisons, over-sexual excitement, childbirth.

STATE ON ADMISSION MORE FULLY AND SYSTEMATICALLY ARRANGED.

A.—Bodily Condition.

a, Height.
b, Weight.
c, Temperature.
d, Color of hair (baldness).
e, Muscularity.
f, Fatness.
g, Expression of face and general appearance.
h, Any special injuries or wounds to be noted.

B.—Vegetative Functions.

a, Digestive—Tongue, stomach, appetite, condition of bowels.

b, Dermic—Conditions as to moistness, eruptions, and other abnormalities.

c, Circulatory—Pulse, cardiac murmurs, flushing of face, or inject. of conjunctiva.

d, Respiratory—State of lungs, breath, rapidity of respiration.

e, Glandular—Exam. of urine, state of liver, spleen, thyroid, &c.

C.—Reproductive Functions.

a, Abnorm. of penis or testes in men—masturbation, syphilis, &c.

b, In women—catamenia, discharges, syphilis, pregnancy, nursing, &c.

D.—Nervous System.

a, Paralysis, epilepsy, catalepsy, hysteria, and other abnormalities unconnected with the special senses or mental functions.

b, Special senses—

1.—Sight—*a*, Color of iris.
b, Shape and size of pupils.
c, Condition of retina.
d, Vision.
e, Knowledge of color.
f, Hallucinations.
g, Illusions.

2.—Hearing—*a*, External ear.
b, Deafness.
c, Hallucinations.
d, Illusions.

3.—Smell—*a*, Any abnormality of nose.
b, Sense of smell.
c, Hallucinations.
d, Illusions.

4.—Taste—*a*, Sense of.
b, Hallucinations.
c, Illusions.

5.—Touch and Nervous Sensibility—
a, Sense of pain.
b, Reflex action.
c, Hyperæsthesia.
d, Illusions and hallucinations, including those of internal organs.

E.—Mental Symptoms, *unconnected with the special senses.*

a, Apparent consciousness.
b, Identity.
c, Attention.
d, Coherence of language.
e, Memory—*a* for recent events, *b* for past ditto.
f, Exaltation or depression of spirits.
g, Excitement of manner.
h, Habits and propensities (filthy, dangerous, suicidal, destructive, indecent, &c.)
i, As to sleep.
j, Delusions—not being hallucinations or illusions.
k, Other abnormalities.

NOVA SCOTIA CASE BOOK.

REGISTERED No. Previous Nos.
Name
Admitted—
Where from
Brought by
Order of
Maintenance
Certificates
Age last Birthday
Sex State as to marriage
Occupation
Natural disposition
Habits in health
Education
Religion
Address of nearest friend

HISTORY.

Age at first attack
First Symptoms { Bodily / Mental
No. and duration of previous attacks
Where treated
Causation { Hereditary History / Predisposing / Exciting
Duration of present attack
Recent Symptoms { Bodily / Mental
Suicidal, and how
Dangerous, and how
Other facts

NAME,

Date.	Temperature.		Pulse.		Weight.	PROGRESS OF CASE.
	Morn.	Even.	Morn.	Even.		

NOVA SCOTIA CASE BOOK—STATE ON ADMISSION.

Bodily Condition.	Height
	Weight
	Temperature
	Color of hair (baldness)
	Muscularity
	Fatness
	Expression of face
	General appearance
	Injuries or wounds (if any)
	General bodily state
Functions.	Digestive
	Dermic
	Circulatory
	Respiratory
	Glandular
	Reproductive
Nervous System.	Paralysis, Hysteria, &c.
	Sight
	Hearing
	Smell
	Taste
	Touch
Mental Symptoms.	Apparent consciousness
	Identity
	Attention
	Coherence of language
	Memory
	Exaltation
	Excitement
	Habits and propensities
	Sleep
	Delusions
	Name of Disease

NAME,

Date.	Temperature.		Pulse.		Weight.	PROGRESS OF CASE.
	Morn.	Even.	Morn.	Even.		

STATEMENT

To be forwarded to the Medical Superintendent when application is made for the Reception of a Patient.

1. Name of patient (in full)
2. Where born
3. Son (or daughter) of
4. Residence County of
5. Age Last Birthday
6. State as to marriage
7. Number and age of children
8. Occupation, (or that of father or husband)
9. Natural disposition
10. Habits, in health—as to temperance, etc.
11. Education
12. Religion
13. Age at first attack
14. Insanity, how first manifested
15. Number and duration of attacks
16. Where under treatment, and when
17. What relatives similarly affected
18. Supposed cause, remote
19. Supposed cause, recent
20. Duration of present attack
21. State as to sleep
22. Appetite for food
23. State of bodily health
24. Whether subject to epilepsy
25. Any faltering of speech, or loss of power, and when
26. Present habits and propensities
27. What delusions
28. Whether suicidal, (attempted or threatened,) and how
29. If dangerous to others, how
30. Pecuniary circumstances, (or to whom chargeable)
31. Post office address of nearest friend, and degree of relationship
32. Other particulars

I certify that to the best of my knowledge the above particulars are correctly stated.

Date,

Name,

Address,

N. B.—If any of the particulars in this Statement be not known, the fact to be so stated. No patient to be sent to Hospital until a reply shall have been received to this Statement.

CERTIFICATE.

(a) Name in full. *I, the undersigned*[a]

(b) Qualification. *being*[b] *and in actual practice.*

hereby certify that I, on the *day of*

(c) Locality. 18 *at*[c] *in the County of*

separately from any other Medical Practitioner, personally examined

(d) Name in full. [d]

(e) Residence. (f) Occupation. *of*[e] (f) *and that the said*

is a person of unsound mind, and a proper person to be taken charge of, and detained under care and treatment; and that I have formed this opinion on the following grounds, viz.:

1. *Facts indicating insanity by myself:**

1. Appearance.

2. Conduct.

3. Conversation.

2. *Facts, indicating insanity, communicated to me*

(g) State the information, and from whom. *by others:*[g]

Name

Place of Residence

Date

N. B.—Two Certificates (dated within one Month of the commitment) are required in every case. The second should not be signed by the father, brother, son, partner or Assisstant of the Medical Practitioner who has signed the first certificate.

*The facts upon which (from personal observation) the opinion of insanity has been formed, should always be specified.

A set of concise and comprehensive tables, including all the data requisite for a fair comparison of results, has long been acknowledged desideratum.

The appointment, in 1869, of a Statistical Committee of this Association, indicated that the speciality in America were equally solicitous with their English and continental confréres to adopt an uniform mode of recording and tabulating year by year the principal facts of professional significance noted from time to time.

To be of statistical value, these facts must be sufficiently numerous, and should embrace a considerable period of time. No single institution can yield more than a portion of the information required; but every superintendent, how limited soever his sphere of observation, may by combined action contribute very materially to the general fund of knowledge. The only way in which individual effort in this direction can be made available for the general good, is by a mutual agreement to adopt certain specified forms of tables, with an undertaking on our part to prepare these for publication in our annual reports.

It will be in vain for the Association as a body to adopt any set of tables, unless the members individually, or a majority of them, engage to follow the main features of the system that may be agreed upon. The very excellent report of our statistical committee, containing a set of thirty-three (33) clear, and for the most part very brief tables, which are recommended for general adoption, has been circulated among members, and is now open for discussion.

The international tables published in the American Journal of Insanity are thirty-one (31) in number, and cover a very extensive field of observation and inquiry. They are, however, probably too elaborate for general use. The tables of the Medico-Psychological Association of England number only ten (10,) and of these there are but three (3) that refer to anything beyond the operations of the year for which the report is given.

By carefully collating these several sets of tables, abridging the more elaborate and simplifying others, it has been found practicable to condense into a series of twenty (20) concise and easily-prepared tables all the information usually given, and perhaps all that may be considered really essential.

The result aimed at in the preparation of these tables, has been to exclude all unnecessary figures, and to avoid repetition; bringing together such facts as have a mutual bearing upon each other. As an instance of what may well be spared in the way of figures,

the third column or total which is commonly given in all tables after the numbers of each sex, may advantageously be omitted from, say four out of every five, not only saving labor in their preparation, but affording a clearer page when printed. See, for instance, tables 5 to 18 inclusive of this series.

One marked dissimilarity between the tables in the reports of the hospitals for the insane of this country, and those adopted in the reports of European asylums, is the absence in the former of any distinction between first admissions and re-admissions. In the international system of tables great stress is laid upon this distinction, many of them having reference solely to patience admitted for the first time; and the want of this separation lessens materially the statistical value of most of the tables published on this continent. Instances have been mentioned where *one* patient has figured *six* times in the recoveries of a single year. If tables are liable to mislead to this extent they become worthless, and the labor spent in their preparation is quite thrown away. Nor is this all; the uncertainty attached to them gives a distaste for statistical research to those who would otherwise avail themselves of the numerical method, and causes a general feeling of distrust to prevade the whole speciality in reference to such tables. The fondness of the members of this branch of the profession for statistical research, as evinced by their publications, has hitherto (perhaps quite accidentally) been for the most part in a relative proportion to the degree of success which has attended their labors as medical superintendents.

It is certainly a matter of commendable pride to be able to exhibit a low rate of mortality, and a high per centage of recoveries; but whether fortunate in this respect or not, there is doubtless in every member of the speciality sufficient "*esprit du corps*" to incline, if not to impel him to contribute his fair quota of professional information for the benefit of his confréres and successors. If every annual report contained a few compendious tables made upon a systematic plan, so that those of one institution could be fairly compared with those of all the others, the available fund of information would be increased in amount and enhanced in value to those who study statistics, while their labors would be materially lessened without any additional tax upon the time or attention of individual superintendents. Whatever system of tables may be agreed upon, the chief difficulty and trouble in their adoption will be in the first year of their use. Once made out it will be a comparatively easy matter to keep them up. To show the results of

the operations of any hospital for the whole period since its opening, so that the last report shall include the statistics of every previous report, it is only requisite to introduce an extra column or two into the ordinary tables; and in order to make room for these, the addition of the numbers of the two sexes may well be left to those who seek the information which these tables afford.

Another abridgment which may run through nearly the entire series is effected by omitting all reference to the classes of cases styled "improved" and "stationary," recording only the admissions, recoveries, deaths, and the numbers remaining. By confining the returns to these essential points, it is not difficult to exhibit clearly the operations both of the present, and all previous years in a table of suitable size for publication.

Take, for instance, the table, "duration of disease," No. 14 of this series. What Psychologists wish to know is how long those have been insane who have recovered, how long those who died, and how long those who continue residents of the hospital. Of these, who have been prematurely removed, or have escaped or have been transferred. No special interest is attached to their age, civil condition, residence, or the like. As units they have already been counted among the admissions and discharges, so that beyond this, for *medical purposes* they may safely be ignored. Omitting the addition of the number of the sexes, and leaving out the cases removed otherwise than by recovery or death, ample room is gained to bring into the same tabular form two sets of facts —such as the age and condition as to marriage, combining two ordinary tables in one—and extending the record over the whole period of the operation of the hospital. This applies equally to the tables of residence, where an additional column shows the population by last census, and another gives the average distance from hospital. So in the table of causes space is thus left to enter the complications.

The series now presented as an abridgment and modification of the American and International tables will be found to cover all the facts of any statistical value which those contain, and particularly as regards the patients remaining under care at the close of the year, this information will be found to be more full and detailed than in any tables yet published. When a professional inquirer ascertains, as he can readily do from the last column of each table, the age on admission, the present age, the number of attacks, the form of the disease and its complications, the cause of insanity, the duration of treatment, with many other particulars relative to

those remaining in hospital at the end of the year, he can form a more correct estimate of their condition and prospects than by the abitrary division of all into two classes, curable and incurable.

In the column alone referring to those remaining has it been thought requisite to give the total of whatever conditions,—and even here it might be omitted.

In submitting these twenty (20) tables for the consideration of the Association, no disparagement is intended toward any other series. They are thought to contain as full and complete information as a majority of the members of the specialty will agree to compile for publications. The first four are from the tables of the Medico-Psychological Association, with the transfer of the "summary" from table four to table two. The other tables of that Association have been altered to supply an obvious deficiency by embracing the operations of all previous years.

Table seven (7) of the English series, taken from Dr. Thurnam's work on Asylum Statistics, might, perhaps, be advantageously substituted for numbers thirteen and fourteen of this series, additional columns being introduced to indicate the results of all former years. This table refers to the duration of insanity previous to admission, and the number of previous attacks, dividing all into four classes. As although familiar to many members of this Association, it may not be known to all, it is added to the present series as an alternative table for examination and comparison.

The whole series, indeed, is offered with a view to elicit a full expression of opinion as to what amount of information every medical superintendent should feel himself bound to contribute to the general stock, and further, in what form it can be most easily tabulated, and most clearly understood.

TABLES.

1. Admissions and General Results for the Year.
2. Admissions and Discharges from opening of Hospital.
3. Operations of Hospital Year by Year.
4. History of Annual Admissions.
5. Age and Condition as to Marriage of all Admitted, Recovered, Died, and Remaining.

6. Nativity of all Admitted, Recovered, Died, and Remaining.
7. Residence " " " "
8. Occupation " " " "
9. Maintenance " " " "
10. Causes of Insanity " " " "
11. Form of Disease " " " "
12. Age and Condition as to Marriage *at first attack* of all Admitted, Recovered, Died, and Remaining.
13. Number of previous attacks and duration of disease before admission, of all Admitted, Recovered, Died, and Remaining.
14. Duration of Insanity, before Admission, in all &c., &c.
15. Months of Admission, Recovery, and Death.
16. Duration of Treatment, Recovery, Death, and Remaining.
17. Whole duration of Disease, Recovery, Death, and Remaining.
18. Causes of Death Year by Year.
19. Annual Expenditures and Average.
20. Annual Receipts.

TABLE 1.

Admissions and General Results for the year 1870.

				Males.	Females.	Both Sexes.
In Hospital, January 1, 1870,.....						
	M.	F.	T.			
First Admissions,.....						
Re-admissions, ...						
Total Admitted,.....						
Present during the year,.....						
Discharged or Removed,.....						
	M.	F.	T.			
Recovered, ...						
Improved, ...						
Stationary,.....						
Died,.....						
Total Discharged and Died during the year,....						
Remaining December 31, 1870, inclusive of males, and females absent on trial,....						
Average No. resident during the year,.....						

TABLE 2.

Admissions and Discharges from the opening of the Hospital, 18 *to December* 31, 1870.

	M.	F.	T.	Males.	Females.	Both Sexes.
First Admissions,						
Re-admissions,						
Total Admitted,						
Discharged or Removed,						
	M.	F.	T.			
Recovered,						
Improved,						
Stationary,						
Died,						
Total Discharged and Died during years,						
Remaining December 31, 1870,						
Average of years,						

SUMMARY OF TOTAL ADMISSIONS.

Per centage of Cases Recovered,						
"	"	"	Improved,			
"	"	"	Stationary,			
"	"	"	Died,			
"	"	"	Remaining,			

TABLE 3.

Operations of Hospital year by year, from 18 *to December* 31, 1870, *with Yearly Average, and per centage of Recoveries and Deaths.*

YEAR	ADMITTED.			DISCHARGED.											Remaining 31st Dec. in each year.			Average Number Resident.			Per centage of Recoveries on admissions.			Per centage of deaths on average No's resident.		
				Recovered.			Improved.			Stationary.			Died.														
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.

TABLE 4.

History of Annual Admissions from 18 *to December* 31, 1870.

YEAR.	ADMITTED.					OF EACH YEAR'S FIRST ADMISSIONS, DISCHARED AND DIED IN 1870.												TOTAL DISCHARGED AND DIED OF EACH YEAR'S ADMISSIONS, TO DEC. 31, 1870.												REMAINING OF EACH YEAR'S ADMISSIONS DEC. 31, 1870.		
	New Cases.		Relapse Cases.		Total.	Recovered.			Improved.			Stationary.			Died.			Recovered.			Improved.			Stationary.			Died.					
	M.	F.	M.	F.	M. & F.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
Total.....																															

TABLE 5.

Age and Condition as to Marriage of those Admitted, Recovered and Died from 18 *to December* 31, 1870, *and of those Remaining.*

Age on Admission, Recovery and Death.	Marital Condition.	1870.						18 to 1870.						Remaining December 31, 1871.		
		Admitted.		Recovered.		Died.		Admitted.		Recovered.		Died.				
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	T.
Under 10 years,																
From 10 to 15 years,																
From 15 to 20 years,	S.															
	M.															
	W.															
From 20 to 25 years,	S.															
	M.															
	W.															
From 25 to 30 years,	S.															
	M.															
	W.															
From 30 to 40 years,	S.															
	M.															
	W.															
From 40 to 50 years,																
Re-admissions,																
Unknown,																
Total,																

TABLE 6.

Nativity of those Admitted, Recovered, Died, and Remaining.

COUNTRY.	1870.						18 to 1870.						Remaining December 31, 1870.		
	Admitted.		Recovered.		Died.		Admitted.		Recovered.		Died.				
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total.
Re-admissions,															
Total,															

TABLE 7.

Residence of those Admitted, Recovered, Died, and Remaining.

PROVINCE, STATE, OR COUNTY.	Population Census 18	Average Distance from Hospital.	1870.						18 to 1870.						Remaining December 1, 1870.		
			Admitted.		Recov'd.		Died.		Admitted.		Recov'd.		Died.				
			M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total.
Total,																	
From Cities of over 5,000 Inhabitants,																	
From Towns of less than 5,000 Inhabitants,																	
From Country Districts,																	

TABLE 8.

Occupation of those Admitted, Recovered, Died, and Remaining.

	CENSUS.	1870.						18 to 1870.						Remaining December 31, 1870.		
		Admitted.		Recovered.		Died.		Admitted.		Recovered.		Died.				
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total.

TABLE 9.

Maintenance of those Admitted, Recovered, Died, and Remaining.

HOW SUPPORTED.	1870.						18 to 1870.						Remaining December 31, 1870.		
	Admitted.		Recovered.		Died.		Admitted.		Recovered.		Died.				
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total.
Own Means,															
By Friends,															
By Brown Fund,															
By County of Kings,															
By County of Hants,															
By Province,															
Transferred from															
to															
Re-admissions,															
Total,															

TABLE 10.

Causes of Insanity in those Admitted, Recovered, Died, and Remaining.

SUPPOSED CAUSES.	1870.						18 to 1870.						Remaining December 31, 1870.		
	Admitted.		Recovered.		Died.		Admitted.		Recovered.		Died.				
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total.
Physical,															
Moral,															
Not Ascertained,															
Total,															

TABLE 11.

Form of Disease in those Admitted, Recovered, Died, and Remaining.

FORM OF INSANITY AND COMPLICATION, ON ADMISSION.	1870.						18 to 1870.						Remaining December 31, 1870.		
	Admitted.		Recovered.		Died.		Admitted.		Recovered.		Died.				
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	T.
Simple Insanity,															
Epileptic,															
Paralytic,															
Senile Dementia,															
Organic Dementia,															
Idiocy,															
Total,															

TABLE 12.

Age and Condition as to Marriage at first attack of those Admitted, Recovered, Died, and Remaining.

AGE AT FIRST ATTACK.	Condition as to Marriage.	1870.						18 to 1870.						Remaining December 31, 1870.		
		Admitted.		Recovered.		Died.		Admitted.		Recovered.		Died.				
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	T.
Under 5 years,																
From 5 to 10 years																
" 10 to 15 "																
" 15 to 20 "																
	S.															
	M.															
	W.															
Total,																

TABLE 13.

Number of Previous Attacks, and Duration of Disease before Admission in those Admitted, Recovered, Died, and Remaining.

No. of Attack and Duration of Insanity before Admission.	1870.						18 to 1870.						Remaining December 31, 1870.		
	Admitted.		Recovered.		Died.		Admitted.		Recovered.		Died.				
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	T.
1st attack within 3 mos.,															
" from 3 to 6 "															
" " 6 " 12 "															
" " 1 " 2 years															
" over 2 years,															
2d attack within 1 year,															
" " " 1 to 2 yrs.,															
" " over 2 years,															
Third Attack,															
Fourth Attack,															
Uncertain,															
Total,															

TABLE 14.

Duration of Disease before Admission in those Admitted, Recovered, Died, and Remaining.

DURATION OF INSANITY ON ADMISSION.	1870.						18 to 1870.						Remaining December 31, 1870.		
	Admitted.		Recovered.		Died.		Admitted.		Recovered.		Died.				
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total.
Under 1 Month,															
From 1 to 3 Months,															
" 3 to 6 "															
" 6 to 9 "															
" 9 to 12 "															
" 12 to 18 "															
" 18 to 24 "															
" 2 to 3 Years,															
" 3 to 4 "															
" 4 to 5 "															
Uncertain,															
Total,															

TABLE 15.

Months of Admission, Recovery, and of Death.

MONTHS.	1870.						18 to 1870.						Remaining at end of each Month, 1870.		
	Admitted.		Recovered.		Died.		Admitted.		Recovered.		Died.				
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	Total.
January,															
February,															
March,															
First Quarter,															
April,															
May,															
June,															
Second Quarter,															
July,															
August,															
September,															
Third Quarter,															
October,															
November,															
December,															
Fourth Quarter,															
Total,															

TABLE 16.

Duration of Treatment of those Recovered, Died, and Remaining.

HOSPITAL RESIDENCE.	1870.				18 TO 1870.				REMAINING DEC. 31, 1870.		
	Recov'd.		Died.		Recov'd.		Died.				
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	T.
Under 1 month,.....											
From 2 to 3 mos.,..											
" 3 to 6 " ..											
" 6 to 9 " ..											
" 9 to 12 " ..											
" 12 to 18 " ..											
" 18 to 24 " ..											
" 1 to 3 years,..											
" 3 to 4 " ..											
" 4 to 5 " ..											

FROM 18 TO 1870, YEARS.

	Recovered.				Died.				Remaining.		
		Y.	M.	D.	Y.	M.	D.		Y.	M.	D.
Average of all cases.	M.										
	F.										
	T.										

TABLE 17.

Whole duration of disease in those Recovered, Died, and Remaining.

WHOLE DURATION OF INSANITY.	1870.				18 TO 1870.				REMAINING DEC. 31, 1870.		
	Recov'd.		Died.		Recov'd.		Died.				
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	T.
Under 1 month,.....											
From 1 to 2 mos.,..											
" 2 to 3 " ..											
" 3 to 6 " ..											
" 6 to 12 " ..											
" 1 to 2 years,..											
" 2 to 3 " ..											
" 3 to 4 " ..											
Total.....											

TABLE 18.

Causes of Deaths, from 18 *to* 1870.

CAUSES.	1845 to 1855.	1856 to 1866.	1867.	1868.	1869.	1870.	Total.
Cerebral or Spinal Disease,							
Thoracic Disease,							
Abdominal Disease,							
Exanthemata,							
Erysipelas,							
General Debility and Old Age,							
Accidents,							
Suicide,							
Total,							

TABLE 19.

Annual Expenditure and Average.

	1870.	Weekly Average.	Mean of — Years.
FOOD, Meat,			
Flour,			
Groceries,			
Vegetables,			
Sundries,			
Clothing,			
Salaries and Wages,			
Medicines,			
Furniture,			
Fuel and Light,			
Incidentals,			
Average per patient, weekly,			
Average per patient, per annum,			
Repairs,			
Insurance,			
Farm Stock and Fodder,			
Total, $			

TABLE 20.

Annual Receipts from all Sources.

	1870.		18 to 1870.	
Board of Private Patients @.....				
" " " @.....				
" Indigent " @.....				
County of Kings,.....				
" " Colchester,.....				
" " Pictra,.....				
" " Cumberland,.....				
District of.....				
Legacies, ...				
Donations.....				
Sale of Farm Stock,...				
Sale of Sundries,.....				
Interest on Investments,..... ...				
" " "				
State or Province, ...				
Total,.....$				

TABLE 7, OF THE MEDICO PSYCHOLOGICAL SERIES.

(DR. THURNAM'S TABLE.)

Extended to embrace the operations of previous years. To replace tables 13 and 14 of this series.

CLASS.	Duration of Disease on Admission in Four Classes.														
	1870.						18 to 1870.						Remaining December 31, 1870.		
	Admitted.		Recovered.		Died.		Admitted.		Recovered.		Died.				
	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	T.
FIRST CLASS. First attack, and within three months on admission,.....															
SECOND CLASS. First attack, above three and within twelve months on admission,.....															
THIRD CLASS. Not first attack, and within twelve mos. on admission,.....															
FOURTH CLASS. First attack or not, but of more than twelve months on admission,.....															
Uncertain,.....															
Total.....															

Dr. Waddell. I began my work in the specialty with the feeling that statistics of our institutions were not of much scientific value, and I have not much confidence in them now. The institution that I represent admits all patients that are sent of all classes, including the epileptic and paralytic, the idiot and imbecile, and they remain, if not restored or partially so, till they die, and there is no other receptacle in the Province in which lunatics of any class are kept. In the institutions in the United States, from the reports of which the general results of treatment of the insane would be drawn, there are only a part of the insane of the country —thousands of their number being in county and alms-houses; it is manifest, therefore, that the result of the treatment in the institutions of the United States and in that of New Brunswick could not at all harmonize, and the blending of their figures would only tend to vitiate the whole.

To compare the statistics in connection with the insane of different countries for the purpose of arriving at correct results, all the insane should be included; and to compare institutions with one another for a similar purpose, the same classes and forms of disease should be compared. In county and alms-houses where supposed incurables are kept, many of whom have been recovered from the institutions for the insane, the rate of cures is very low, and the rate of mortality correspondingly high, and to arrive at a correct result regarding the recoveries and deaths in the country, these rates and the rates that the reports of institutions for the insane furnish, should be averaged.

My friend, Dr. DeWolf, has had but part of the insane of Nova Scotia at any time under his charge, and for years comparatively but a small number; his reports, therefore, give the result of treatment, &c., for the patients in the institution. My report exhibits the same thing for all, or nearly all, the patients in New Brunswick.

Again, different persons, judging from the same symptoms, may arrive at altogether different conclusions regarding the causes of disease, and in the same way may differ as to the causes of death, and so on as regards other things with which statistics are concerned. It is sometimes very perplexing to fix on the real cause of death, there being influences so multifarious, all tending to produce it. On the whole, I can not see that much good is to be gained in any way by statistics as at present made up, and especially by numerous and complicated tables.

Dr. Compton. I have few or no suggestions to make as to the

kind of tables we should have in our reports, especially in the presence of the great statistician, Dr. Jarvis; but if statistics are understood to be the embodiment of those that have gone before us, as well as the older members of the specialty who are with us, I think their value can not well be estimated, for they are drawn upon by Superintendents in the United States, British America and the other continent. Inasmuch as some fault has been found, perhaps it would be as well to recommit the subject, and add a member to the committee; let the committee be continued and report at the close of the next meeting. I would like to see uniformity, especially in the statistics of our institutions, and I would also like to have the landmarks laid down for me.

Dr. Everts. I shall accept whatever forms of tabulation may be recommended by this Association, and comply with them mechanically. If there is any one thing which I have less talent for than another, it is statistics. If there is any one source of information from which I derive less knowledge than another, it is statistical tables. If we attempt by uniformity to render our statistics more useful, we should also require uniformity of education and thought as observers. We do not agree as to causes, or nomenclature, or characteristics of disease. Thus the same form of disease may be classified by different observers under different heads. There are, in fact, so many sources of error vitiating the purity of statistics in all such unfixed matters as we have to deal with in this specialty, that it is difficult to derive much that is reliable from them. I can not illustrate the imperfection to which such statistics are liable, better than by relating a circumstance which came under my own observation. In coming from Fortress Monroe to Point Lookout Hospital, during the war, on a hospital steamer, several soldiers died on the passage. On arriving at the hospital, the bodies were carried off the boat and laid on the wharf. No one knew when they died or how. The Assistant Surgeon, in charge of the General Hospital, with a steward and record book, came out and viewed the bodies. The steward was a German, speaking English badly. He opened his book, with the printed forms furnished from the Surgeon General's office, and remarked to the medical officer, "What for I say this man die mit?" I say he die mit rheumatisms?" "O, no." "I say he die mit typhoid febers? he must die by dem regulation." And I suppose that it was so recorded for the benefit of the Army Medical Bureau.

Dr. Jarvis. If we wait until we have perfect methodical demonstration upon every point, or any point in respect to the founda-

tion of our statements concerning disease, we should never derive any advantage from anybody's experience, but every one would have to grope his own way. The advances in relation to the vital system have not been anything like those in astronomy, railroads, commerce or engineering; but we can take up where the last has left off. That is the best we can do, and that is the best the world has done. Upon this the medical man bases his own plans, and from those in whom he has confidence he gains enlarged ideas and uses them in practice. That is the way we have improved from our earliest experience to the present. We thus make advancements. You will make books, and good books, which will be profitable to each one of you, and you will get books based upon these tables, and make progress for all time; until in the course of ages,—it may be a thousand years,—they will come to that perfection in these matters so much desired. With what information we have, let us do the best we can; because we may have but one talent, is no reason why we should bury that in the earth, and say at last, "We knew we could not tell a perfect tale, and therefore we said nothing." There are, of course, different causes, and we can not get perfection, any more than we can get perfection out of our own reasoning. We can make advancement in the progress of disease, although there are some causes very vague. Some Superintendents whom I know, and I doubt not all, record all the facts they can learn from the friends of the patients as to the causes of the malady; but afterwards they have other and more satisfactory information by which they correct the record, and present very different and more rational explanations of the origin of the disease.

The influence of the location of a hospital upon its use by the people, is a remarkable instance of the importance of taking wide surveys and gathering the experience of many institutions in as great a number of states as possible.

There was once a great ambition of states and governments— it is not extinguished now—to have great, grand, magnificent hospitals in the centre of their territory, where they could gather a multitude of lunatics—all that were in their domain. But the thorough analysis of their population and counties, and comparison of the number of patients which they respectively sent to the central institution, showed that this was all a delusion. The near people sent many, but the remote people sent few. The government of the State of New York caused an examination of all the States and all the hospitals of the country for this purpose. The re-

port was published in 1866. It was found that the counties nearest to hospitals sent three to nine times as many as those that were the most distant, according to their population in the various States: in Massachusetts two or three times as many, and in one of the Carolinas nine times. The result from a very careful calculation was that from the beginning of the hospital to the time the report was published, just in proportion as the counties were distant from the hospital, they diminished their use of it. In different States in proportion to their hospitals, the counties nearly had this proportion of 2, 3, 4, or 5. That was a lesson. It showed that a State could not put up one grand hospital, near its centre, with any expectation that all the people would enjoy its advantages equally. If these advantages are to be enjoyed by all the people in the State, they will have to carry their hospitals to their neighborhood. These figures give a lesson that ought to be taught to each legislator, so that all the people shall find a hospital within their reach where their insane may be carried.

Dr. Ray. It would seem at first blush that the form of disease would be a very suitable subject for inquiry—that it might throw some light on the final result. But the difficulty is that no two persons probably would agree upon the requisite distinction. Here we have in this table, "acute mania, homicidal mania, suicidal mania, periodical mania." Now what are we to do with cases that are both acute and periodical, and how many attacks are required to constitute a periodical case? Two, three, four or five? So, too, mania may be both suicidal and acute or chronic, and no particular form continues through the whole course of the disease. Then here is monomania and melancholia. How are they to be distinguished from each other? The two terms were once applied to the same form of disease, and I doubt if there is much agreement yet as to the exact meaning of monomania. No man can be sure when he speaks of a certain form of insanity, that he means by it precisely what everybody else does. There might be a difference of opinion as to the exact form to which a certain case should be referred, and that would make the statistics utterly useless. I notice a table here under the heading of "Death and the Causes." I have no hesitation in saying, and I think the statement must be confirmed by most of the gentlemen present, that any doctrine as to the causes of death founded on this table can be of little worth, for the simple reason that a large portion of the cases are not examined after death. Nothing but a post mortem examination can make us quite sure of the lesions produced by disease. If you

mean to rest the use of statistics on the doctrine of approximation, meaning thereby that we approach the truth by reducing error to its maximum extent, I can only say, I am not prepared to believe that two errors or any number of errors can make one fact. It is very common, in this class of tables, to see a number of cases put down, "exhaustion from mania." I am at a loss to know what form of disease is meant by that term. If it refers to what is called "acute delirious mania," which comes on suddenly, runs its course rapidly, and the patient dies, I much question the correctness of the term, because it is equally applicable to the termination of chronic mania. Is it not very much like saying that a man dies "for want of breath?" But it conveys the wrong impression. "Exhaustion" implies a loss of muscular power; but patients who die in acute mania may evince an extraordinary degree of muscular power up to the very last. Even were it otherwise, it would not be very sound pathology to regard the exhaustion as the cause of death. We do not say when a person dies of consumption, that he dies of exhaustion from consumption, however much he may be exhausted, but from consumption. I observe that three cases here are attributed to strangulation. As to what kind of strangulation is here meant, we are left in doubt. Persons are sometimes strangled by food lodging in the œsophagus, and sometimes by intentional suspension. If it means the latter, I can only say that it is a very roundabout expression for the fact. It reminds one of the reply of the man when asked about the death of his brother, who died by the hands of the hangman, "He fell suddenly from an elevated position." I will not take up the time of the Association any longer. It is enough to say that these tables confirm the generalization that must always be urged against statistics concerning facts which may or may not be true, and opinions which may or may not be unquestioned.

Dr. Workman. I was not present at the reading of the paper, and therefore am not qualified to express any opinion on its merits. I think I am inclined to agree with Dr. Ray. If I could see the use or the practical result of the compilation of these tables, then I would be willing to undertake the labor involved in them. It certainly is understood by the whole of us that we have enough to take up our time in other labor than this. I say unless the head of the establishment does this labor himself, it must be imperfectly and obscurely done. The Superintendent must himself work on these tables. I think in the compilation of these forty tables, we should lose an amount of labor worth over two months of the whole

year. I ask whether this time should be lost to our patients? Show me instead the practical result of our treatment, or a better understanding of the pathology of their cases. If we spent half of this time in the wards amongst our patients, conversing with them and doing the best we can in regard to their moral treatment, it would be well bestowed. Again, I have found I can not be in two places at once. I have myself thought I could do best by treating this work as so much buncombe, and going no farther than I was compelled to go. How many of the readers of the tables understand them at all? I have often been embarrassed, sometimes disgusted, by remarks appearing in the newspaper press upon my statistics. So far from tending to do any good at all, they only tend to discolor the whole subject. Instead of giving that table of causes of death, why not merely give an analysis of autopsical examinations; and if we have thoroughly explored the causes of them, we might throw some light on the pathology. But even here there is a difficulty: for after you have made a post mortem examination, you find it almost impossible to express the real cause of death in tabular form, because you have more than half a dozen various causes. Suppose in a case of ordinary consumption the patient has undergone attacks of hectic fever, and diarrhœa, and finally sinks within thirty-six hours; is not the diarrhœa the last form of disease before death? And yet it is only one of the late phenomena of the disease,—the real cause has been the destruction of the lungs. Again, turn to tubercular disease generally: the disease may exist in various organs. How as to the table in which you introduce half a dozen of these causes, unless you give the whole of them, and a rational summarization, how are we to draw any intelligible result from it? I have given the subject a great deal of thought, and am convinced if the requirement of statistics was abolished entirely, and it was left to good sense and industry to present such facts as we know for certain will be of real value in imparting correct knowledge of the nature of insanity, its physical associations and the results of treatment, then we would confer a great benefit upon the insane world. I look upon the compilation of these papers as an incubus. I have known in past experience a member of our Board taking up my statistics, and making use of the figures in direct opposition to the facts. I think it was Joseph Hume who said, "You can make anything out of figures, if you spread them and manipulate them according to your own conceived notions." I do not feel inclined to go further, because I have given my views in numerous reports and papers which many here present have seen.

Dr. JARVIS. Some years ago I was with my friend Dr. Bell, whom we all remember with great respect and love, and who had great confidence in our friend Dr. Ray. Dr. Bell told me, with a good deal of satisfaction, that during a recent visit to him, Dr. Ray spoke of some new method of treating a form of mental disorder. Dr. Ray is a very careful observer and cautious reasoner. He acts upon no uncertain data. When he forms his opinion in regard to any method of treatment, he summons the events of his experience before his mental eye, and analyzes these into causes and consequences, and determines the power of the former and the relation of the latter. He does not count exactly, and say to himself there were twenty-three cases, of which twenty or twenty-one or twenty-two had the same result, and one, two or three terminated otherwise; therefore the former must be accepted as the legitimate consequence of the means that were used. Yet he taxes his memory, which is excellent, better than belongs to most, and finds that, in general, a majority of the cases with a definite treatment had a similar determination, and this he takes as the guide of future action. All physicians act upon similar principles with varying extent of experience, and various degrees of accuracy, in their observations and deductions. The difference between this and the statistical method is, that the latter demands an exact record of all the primary facts, and moreover it adds to any one's personal experience the facts and observation of others who have wrought in the same field. This applies to all the facts connected with insanity which are or may be matters of record, and which are usually stated in hospital reports. We can bring all the experience of all the hospitals to bear upon and illustrate any point, and be guides for all, and we may present all these facts in such uniform manner in the reports that all who examine any topic referred to in them may derive unmistakable benefit.

I am well aware that medical and pathological language is not always exact, and that all men do not always mean precisely the same thing by the same words, especially in the designation of human ailments. The terms melancholia, mania, fever, consumption, do not convey a meaning as precisely definite as terms in exact science, as inch, foot, ounce, pound, &c. Yet they are as exact as many of the terms used in the common affairs of life, and if we were to refuse to use these terms, either orally or in writing or printing, until all should understand them alike, conveying and receiving exactly the same ideas by their use, a large part of our business and intercourse would stop. Yet we are continually us-

ing these vague terms; people understand them and transact their business with them, and nobody is mistaken or defrauded.

So in case of these tables of mental diseases, or the circumstances connected with it, or its results. The readers understand what is meant by the language; none are misled, but all are enabled to study the science with more satisfaction and advantage.

Dr. Shew. While endeavoring to prepare our report in accordance with the form of statistical tables recommended by the committee, we were met by the same objections that have been raised here to-day. A few of the tables required considerable time and labor; but the one that really gave us the least trouble of all, I was surprised to find, is the one that Dr. Ray objects to as being unreliable in nearly all respects. I refer to the table of death and the causes. It probably gave us the least trouble from the fact that our institution has a regular pathologist, whose duty it is to make thorough autopsies of all important or doubtful cases. You will find this table given in our report with only five cases under the heading, "undetermined." Nearly all of our patients are from the poorer classes, and yet we seldom meet with objection on the part of friends. I make it a rule, when a patient is admitted, to ask permission to have a post mortem examination in case of death. Usually it is granted without hesitation; sometimes they wish to confer with their friends or the priest. In nearly all of these cases we subsequently receive the desired permission, and a record to that effect is made in the case book.

We have introduced this year a pathological report—I think for the first time in institutions of this kind. The report of the pathologist gives a history of two cases, and the microscopical examinations. One of these cases appears upon our books simply as a case of mania—one of a thousand of similar cases which would attract no unusual atttention during life, and yet after death we found most interesting lesions, so interesting in fact that plates representing the microscopical appearances have been prepared for publication in some of the medical journals. This practice, if continued from year to year, will in the end make our reports valuable. I have often been asked by physicians why the reports of institutions for the insane do not contain the same kind of facts as reports of general hospitals. "Why can we not learn something from them in regard to insanity, and the treatment of this disease, or in regard to the causes of death? Why wait until progress has been made?" they say. Of what interest to us is the report of the fact that you use three brooms in one hall in the month of January, and

two pieces of soap in another; that is not what we want, but something about the treatment of insanity and the results.

Dr. KIRKBRIDE. Are annual reports proper places for these pathological reports? It seems to me they belong to medical journals; but I think, in our Legislature, they would not be accepted as in a proper position.

Dr. SHEW. Our reports are called for by act of the Legislature —not alone for the Legislature, but also for the profession. To promulgate enlightened views respecting insanity is the main object of the reports. They are made to the Legislature, but with a view of giving information to its members and the profession.

Dr. KIRKBRIDE. And the people of the State?

Dr. SHEW. We circulate our reports among the people. One copy is sent to every physician, every civil officer, and every member of the Legislature of the State. But our reports are not kept for the general public and visitors to the institution. I think in a majority of cases even reporters of newspapers and visitors are more apt to receive erroneous impressions from the reports than otherwise.

Dr. WALKER. What value does the Doctor attach to that pathological report in cases of ordinary insanity? He says it did not differ from hundreds in which he found microscopic traces of lesions.

Dr. SHEW. It is very interesting to know what these lesions are. This case would have been diagnosed by all physicians simply as a case of mania; and had the autopsical examination been made without the aid of a microscope, these lesions would not have been discovered.

Dr. WALKER. Because important lesions were found in this case, are we to be looking for them in all cases?

Dr. SHEW. I believe that by a careful study of these cases, we shall in time be able to classify them, and recognize their diagnostic symptoms during life. For this reason I requested the appointment of a pathologist.

Dr. WALKER. I am not speaking of that particular case in a carping spirit. It seems to me to be one of those exceptional cases, and after all teaches nothing to the practitioner. I know that in a great mass of these observations, there will be very instructive lessons taught. This seems to be singled out as an extraordinary case.

Dr. SHEW. The point that I wished to make was simply this; that in a series of years these pathological studies, carefully made, will enable us to make greater progress than heretofore.

Dr. GUNDRY. Is this report furnished by order of the Legislature?

Dr. SHEW. Yes, sir.

Dr. GUNDRY. Do not the members have a certain number of copies for their own distribution?

Dr. SHEW. Three hundred copies are sent to the Legislature. More can be had if called for.

Dr. GUNDRY. Does it not get to be a public document?

Dr. SHEW. Yes, sir; we have in our State two hundred and thirty-five members of the Legislature, and they have never required us to send over five hundred copies to the department.

Dr. KIRKBRIDE. Are the members of the Legislature at all competent to appreciate the results of the pathology?

Dr. SHEW. Very few.

Dr. WORKMAN. Are the members competent to read the reports at all?

Dr. SHEW. They certainly would not allow us to make a special report for physicians, and another report for general circulation.

Dr. KIRKBRIDE. Could not the medical report be circulated in the medical journals? I do not wish to undervalue the labors of pathologists. I appreciate them. I think it would be better to publish these reports in medical journals than in a pamphlet for public circulation.

Dr. SHEW. It has always seemed to me that the report of a State hospital should be for public distribution. We have changed the name of institutions for the insane and now you hardly ever find the word asylum given to a new institution. I suppose that this change has been made by the advance of science; in view of the fact that we claim that insanity is a curable disease in a majority of cases, and therefore the word Hospital is the proper name. I can not see why a hospital for the insane should be different from a general hospital.

Dr. KIRKBRIDE. My report is to the Board of Managers who are not professional men, and do not appreciate such a report. It shows the general operations of the institution and gives the kind of information which I think it is important to communicate. That is the distinction I would make,—the medical for medical journals.

Dr. SHEW. You make such a report to your board as they require; but it seems to me that the State hospitals should try to meet the wants of the profession, of the State, and of the community. I think one mistake that has been made in the past, and one reason why our public institutions for the insane are in many vicinities

looked upon with distrust,—(you will recognize that it is so among the ignorant people particularly) is that you have tried to secrete or keep back important facts from the people. I believe that the more generally these important facts are disseminated, the more generally our hospitals will be supported and maintained.

Dr. Kirkbride. I hope I shall not be misunderstood by my friend Dr. Shew. I approve fully of the views expressed in regard to these pathological investigations, but I believe that the results ought to be given to the medical profession through the medium of the medical journals rather than in our annual reports. These latter have always seemed to be intended more especially for the public than for the medical profession, and if so there are obvious reasons why these details of pathological investigations had better be published in the professional journals. I approve entirely of the publication of hospital reports. Instead of 300 I should think 3,000 a desirable number. I appreciate most fully the labors of the gentlemen who are devoting themselves to these pathological investigations. I know how much labor it involves, having, for many years, investigated thoroughly every case where proper permission could be obtained. It was made the exception rather than the rule afterwards, on account of the labor required and the want of a special pathologist.

Dr. De Wolf. The object of reports of hospitals for the insane is two-fold; first, to inspire confidence in its management by giving the fullest information as to the mode in which the institution is conducted, and the second (and equally important) object is the accumulation of facts of professional interest for scientific purposes. Hence the numerous tables in every report. The report which I hold in my hand of the Cumberland and Westmoreland Asylum, contains a medical appendix,—a plan which might well be adopted in all our reports. We could have two editions, one omitting the statistical tables, which are of no general interest whatever, and another with these tables and such matters of professional moment as we might not wish to publish for the general reader.

Dr. Gundry. The Doctor is probably not aware that the reports when published by order of the Legislature are sometimes taken out of the hands of the superintendent. In the western States the reports are published pretty generally in that way. We send the report to all physicians, of course, and there are certain other people you can not well refuse to give it to. Now there is a large class of people into whose hands it is just as well not to put the report. In some places a report is offensive. I think it would

not be well for friends who are going to send to a hospital persons near and dear to them to look over a pathological report. I admit the value of pathology. I am glad that it has been introduced in hospitals where they can get it. I think it is a step in the right direction. I do not wish to be understood as discouraging these men in the least. All I contend for, is on the principle of the man at the hotel who desired that his butter and the hairs should be brought in on two plates.

Dr. Curwen. I move that the report be adopted as the basis of the reports of the different institutions in this country.

After discussion as to the particular wording of the resolution, it was finally seconded and agreed to as follows:

Resolved, That the report of the committee be recommended as the basis on which the different statistics of the hospitals be made.

Dr. Kirkbride. At the last meeting of the Association a committee consisting of Drs. Walker, Everts and myself were appointed upon the subject of Didactic and Clinical Instruction in Insanity. The committee have conferred together and do not propose to give any lengthy report, but instead, simply to submit three resolutions, which I will now read.

Resolved, That in view of the frequency of mental disorders among all classes and descriptions of people, and in recognition of the fact that the first care of nearly all these cases necessarily devolves upon physicians engaged in general practice, and this at a period when sound views of the disease and judicious modes of treatment are specially important,—it is the unanimous opinion of this Association that in every school conferring medical degrees, there should be delivered, by competent professors, a complete course of lectures on insanity and on medical jurisprudence, as connected with disorders of the mind.

Resolved, That these courses of lectures should be delivered before all the students attending these schools; and that no one should be allowed to graduate without as thorough an examination on these subjects as on the other branches taught in the schools.

Resolved, That in connection with these lectures, whenever practicable, there should be clinical instruction, so arranged that, while giving the student practical illustrations of the different forms of insanity and the effects of treatment, should in no way be detrimental to the patients.

Dr. KIRKBRIDE. In reference to this matter of didactic and clinical instruction in cases of insanity, I may say, that it is not a new one. Both were given in Philadelphia long since,—as far back as the time of the distinguished Dr. Benjamin Rush. He gave lectures on insanity, in the University of Pennsylvania, at which he was a professor, and he took his class around with him, and lectured on the cases of insanity in the Pennsylvania Hospital, of which he was one of the attending physicians. Making proper allowance for the knowledge and the views of that day, I do not doubt that these two courses of lectures combined were about as complete as anything we have had in this way. As you all know, courses of lectures on insanity have quite recently been delivered in the Medical Department of Harvard University by Dr. J. E. Tyler, in one of the New York colleges by Dr. D. T. Brown, and in Philadelphia by Dr. Isaac Ray; but in at least one of these there was the radical defect, that it was only a summer course; was listened to by only a small portion of the students, and that the students were not examined on the subject when applying for their medical degrees. Lectures on insanity clearly ought to be a part of the regular winter course, and students should be as carefully examined on this subject as on any other branch of medicine, before commencing the practice of their profession. The resolutions which I have just read are brief, but they seemed to the committee to be about all that was required to express the views of the Association.

The resolutions were unanimously adopted.

On motion, it was

Resolved, That a copy of these resolutions be sent by the Secretary to the American Medical Association, the Dominion Association and Ontario Association of Canada, to each State Medical Society, and each Medical College in the United States and British Provinces.

The Committee on Improvements and Plans of Hospitals, reported progress and asked to be continued; which was agreed to.

The Committee on Dr. Stuart's letter also reported progress and asked to be continued; which was agreed to.

On motion of Dr. Gundry, it was

Resolved, That when the Association adjourn, it adjourn to meet at the Asylum for the Insane this afternoon.

On motion, the Association adjourned.